IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (Original) A device that records information using a light on an optical disc, which is rotated at a constant speed by controlling a number of rotations per unit time used to record the information, the device comprising:

a linear velocity detector that detects a linear velocity using a velocity of a spot of the light, which records the information on a surface of the optical disc, in a tangential direction of a circumference of the optical disc; and

an optical power controller that controls an optical power of the light that records the information to the optical disc based on the linear velocity detected by the linear velocity detector.

2. (Original) The device of claim 1, wherein the linear velocity detector further comprises:

a disc clock detector that detects a constant disc clock using tracks formed on the surface of the optical disc, even though a frequency of a length unit of the tracks previously recorded is on any position of the surface of tracks, and outputs a frequency corresponding to the linear velocity; and

a frequency to voltage converter that converts the frequency of the disc clock detector into a voltage, wherein the optical power controller controls the optical power of the light to record the information on the surface of the optical disc based on the voltage.

3. (Original) The device of claim 2, wherein the linear velocity detector further comprises a square root calculator that calculates a square root of the voltage output by the frequency to voltage converter, and the optical power controller controls the optical power of the light to record the information on the surface of the optical disc based on the square root calculated by

the square root calculator.

4. (Original) The device of claim 3, wherein the linear velocity detector further comprises a switch that selectively allows the voltage output by the frequency to voltage converter to be input to the square root calculator based on a type of the optical disc.

5. (Original) The device of claim 2, wherein the linear velocity detector further comprises:

a digital to analog converter that outputs a second voltage; and

an adder that adds the second voltage to the voltage output from the frequency to voltage converter, and transmits the added voltage to the output power controller.

6. (Original) The device of claim 5, wherein the linear velocity detector further comprises a switch that selectively allows the voltage output by the frequency to voltage converter to be input to the adder based on a type of the optical disc.

7. (Original) The device of claim 5, wherein the linear velocity detector further comprises a square root calculator that calculates a square root of the voltage output by the frequency to voltage converter, and the optical power controller controls the optical power of the light to record the information on the surface of the optical disc based on the square root calculated by the square root calculator.

8. (Original) The device of claim 7, wherein the linear velocity detector further comprises a selector that selectively allows F/V output voltage to be input to the square root calculator or to bypass the square root calculator.

9. (Original) The device of claim 2, further comprising:

a microprocessor comprising the linear velocity detector and the optical power controller.

10. (Original) A device that records information using a writing laser beam on an optical disc, comprising:

a controller which holds the optical disc to a constant speed by controlling a number of rotations per a unit of time;

a linear velocity detector that detects a linear velocity using a velocity based on a velocity

of a spot of the writing laser beam in a tangential direction; and

an optical power controller that controls the writing laser beam to write information to the optical disc based on the linear velocity.

11. (Original) The device of claim 10, wherein the linear velocity detector further comprises:

a disc velocity detector that detects a disc velocity using a least one information track of the optical disc and outputs a frequency; and

a frequency to voltage converter that converts the frequency of the disc velocity detector into a voltage related to the frequency, wherein the optical power controller controls the writing laser beam based on the voltage.

12. (Original) The device of claim 11, wherein the linear velocity detector further comprises, a square root calculator that calculates a square root of the voltage output by the frequency to voltage converter, and the optical power controller controls the writing laser beam based on the square root of the voltage.

13. (Original) The device of claim 11, wherein the linear velocity detector further comprises:

a digital to analog converter that outputs a second voltage; and

an adder that adds the second voltage to the voltage output from the frequency to voltage converter and transmits the added voltage to the optical power controller.

14. (Original) A method of recording information using a light on an optical disc, which is constantly rotating by a number of rotations per unit time, the method comprising:

detecting a linear velocity from a velocity of a spot of the light which records the information to the optical disc, in a tangential direction of a circumference of the optical disc; and

controlling the optical power of the light, to record the information to the optical disc based on the linear velocity.

15. (Previously Presented) The method of claim 14, wherein the linear velocity detecting further comprises:

detecting the linear velocity using a least one information track of the optical disc and outputting a frequency; and

converting the frequency into a voltage related to the frequency.

16. (Previously Presented) The method of claim 15, wherein the linear velocity detecting further comprises calculating a square root of the voltage, and the controlling of the optical power of the light is based on the square root of the voltage.

17. (Previously Presented) The method of claim 16, wherein the linear velocity detecting further comprises, selectively allowing the voltage output by the converting to have the square root calculated based on a type of the optical disc.

18. (Previously Presented) The method of claim 15, wherein the linear velocity detecting further comprises:

outputting a second voltage; and

adding the second voltage to the voltage output from the frequency to voltage converting and the controlling of the optical power of the light is based on the adding the second voltage to the output from the frequency to voltage converting.

19. (Previously Presented) The method of claim 18, wherein the linear velocity detecting further comprises:

selectively allowing the voltage output by the frequency to voltage converting to be added to the second voltage based on a type of the optical disc.

20. (Previously Presented) A recording device that records information on an optical disc using a light from a laser, which is rotated at a constant speed, the recording device comprising:

a laser driver which drives the laser according to a driving signal; and

a control circuit which generates the driving signal selectively based upon a linear velocity of the light on the optical disc and not based upon the linear velocity, according to a recording material of the optical disc.

21. (Cancelled)

22. (Previously Presented) A recording device that records information on an optical disc using a light from a laser, which is rotated at a constant speed , the recording device

comprising:

an optical power control circuit which determines a power of the light according to a control reference voltage; and

a control circuit which varies the control reference voltage according to a disc clock signal recorded on the optical disc if a recording material is a first type, wherein the control circuit comprises:

a disc clock detector that detects the disc clock signal from tracks formed on a surface of the optical disc,

a digital to analog converter that generates an analog signal, and

control elements that selectively use both the disc clock signal and the analog signal to determine the control reference voltage if the recording material is the first type and use the analog signal without the disc clock signal if the recording material is a second type different from the first type.

23. (Cancelled)